TITLE 326 AIR POLLUTION CONTROL BOARD

#05-117 (APCB)

SUMMARY/RESPONSE TO COMMENTS RECEIVED AT THE FIRST PUBLIC HEARING

On June 7, 2006, the air pollution control board (board) conducted the first public hearing/board meeting concerning the development of amendments to 326 IAC 10-3 and 326 IAC 10-4 and new rules 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3. Comments were made by the following parties:

Indiana Energy Association (IEA)
Citizens Thermal Energy (CTE)
Indiana-Kentucky Electric (IKEC)
Hoosier Energy (HE)
American Electric Power (AEP)
Duke Energy (DUKE)
Improving Kids' Environment (IKE)
Hoosier Environmental Council (HEC)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: The Indiana Energy Association's (IEA) membership is made up of Indiana's fourteen (14) investor owned gas and electric utilities and one (1) public charitable trust gas utility. Comments as made on behalf of the IEA membership and three (3) non-member participants (Dominion State Line Energy, Indiana Kentucky Electric Corporation and Hoosier Energy REC, Inc.) of the Indiana Utility Group (IUG). The IUG has been involved in the IDEM Utility Rules Workgroup and supports the draft rule for the following reasons:

- makes substantial environmental improvements;
- mirrors the federal rule;
- balances the costs to utility customers and shareholders with environmental improvement;
- provides regulatory certainty;
- will allow for continued reliable electric generation by, in part, providing sufficient time for installing new controls.

Whether considering IDEM's estimates on cost of implementation of this rule or the estimates produced by IUG, they are substantial. The costs of complying with the Clean Air Mercury rule will add to this compliance cost and additional charges to utility customers as well. A hidden cost is the substantial amount of power required to operate these controls. Industry estimates are that to operate an individual scrubber for the required SO_2 reductions requires approximately two

percent (2 %) of the total megawatt capacity of the plant. The projected thirteen (13) (IUG estimate) to seventeen (17) (IDEM estimate) scrubbers to be installed provides for a considerable loss of supply. (IEA)

Response: IDEM appreciates the support and will continue to work with the affected parties to address any remaining issues by final adoption.

Comment: The commenter supports the allocation methodology provided for large affected units (non-EGUs) in the draft rule for preliminary adoption. The allocation methodology will not penalize the owners or operators who experience fluctuations in operations due to weather or economic influences and provides a mechanism to move new units into the regular existing source allocation pool which did not exist in the NO_x SIP Call rule. An energy efficiency and renewable energy (EE/RE) set-aside that is connected with the new unit side aside is important. This provides further assurance that allowances will be available for projects at existing facilities. The commenter also supports the inclusion of an opt-in provision for the annual trading program, and endorses the comments submitted by IEA. (CTE)

Response: IDEM appreciates the support.

Comment: Indiana-Kentucky Electric Corporation (IKEC) operates the Clifty Creek Station located in Madison, Indiana. The Clifty Creek Station is a six (6) unit one thousand three hundred four (1,304) megawatt coal-fired electric generating station. IKEC is not a public utility and does not directly serve any Indiana customers. However, IKEC is owned by eight (8) different public utility companies that receive one hundred percent (100 %) of the electric power generated at this station, and three (3) of these companies do directly serve Indiana customers. In addition to the comments offered by IEA, the commenter provides some additional comments on this rulemaking. First, the utilities rules workgroup provided a positive forum for addressing issues with the CAIR rulemaking. Second, IDEM took the correct approach in following the federal cap and trade program for CAIR and IDEM should take the same approach in the upcoming state rule implement the federal Clean Air Mercury Rule. Third, IDEM has taken the correct approach to the changes that were made to the annual and ozone season control period NO_x allocations for electric utilities. Finally, the approach IDEM included in the draft rule for electric utilities to earn early NO_x reduction credits during 2007 and 2008 is an important improvement over the federal rule because it provides the needed certainty to encourage early NO_x reductions outside the ozone control period. Reductions needed to comply with the federal acid rain program and the Indiana NOx SIP Call rule where achieved by switching from eastern high-sulfur bituminous coal to a blend of predominantly western low-sulfur subbituminous coal in 1994, the addition of overfire air systems on all six (6) units in 1998 and 1999, and the addition of selective catalytic (SCR) on five (5) units in 2002 and 2003. To comply with the proposed Indiana CAIR, IKEC plans to install flue gas desulfurization (FGD)/scrubbers on all six (6) units at Clifty Creek by 2010. (IKEC)

Response: IDEM appreciates the support.

Comment: Hoosier Energy operates two (2) coal-fired power plants with combined generating capacity of one thousand two hundred sixty-six (1,266) megawatts. In addition Hoosier Energy operates two (2) simple cycle gas-fired combustion peaking facilities with a collective capacity of four hundred thirty (430) megawatts. One of the coal-fired stations, Merom Station in Sullivan County, consists of two (2) five hundred eight (508) megawatt units burning high sulfur coal from southern Indiana each equipped with a wet limestone FGD, a SCR, and a cold-side electrostatic precipitator (ESP). The other coal-fired station, Ratts Station in Pike County, consists of two (2) one hundred twenty-five (125) units burning medium sulfur coal from southern Indiana each equipped with low NO_x burners and cold-side ESP. With SCR and FGD already installed at the Merom Station, Hoosier Energy is poised to be in compliance with CAIR. IDEM's analysis assumes installation of SCR and FGD at the Ratts Station. Hoosier Energy has not made any commitments to install these technologies at the Ratts Station since they are older smaller units and is still evaluating available compliance option. The flexibility provided by a cap and trade program is extremely important. This flexibility is also essential for the mercury rule which the board will consider later in a separate rulemaking. The commenter also supports the utilities workgroup process and the comments presented by IEA. (HE)

Response: IDEM acknowledges that controls projected to be installed at specific units may not be the compliance options that a utility chooses to use to comply with CAIR. IDEM appreciates the support expressed for the draft rule.

Comment: Indiana-Michigan Power Company, a subsidiary of American Electric Power and member of the IEA, supports the comments made by IEA. The workgroup meetings for this rulemaking have been beneficial and the draft CAIR that generally follows the federal CAIR rule should be a very workable rule for the regulated community. There is one item that raises concern and that is the cost analysis. Both the IDEM and IUG cost analyses underestimate compliance costs because of two (2) unanticipated issues: construction site labor costs and the impact of high demand for steel, both structural and allow, and fiber-reinforced plastics (material costs). (AEP)

Response: IDEM acknowledges that there maybe unanticipated costs to comply with the rule.

Comment: Duke Energy Indiana is the largest electric power company in Indiana with over ninety-five percent (95 %) generated from coal. Even though the rule will require installation of many new and expensive pollution control devices the commenter supports the rule. The rule strikes an appropriate balance between the original objectives of the federal rule and Indiana specific concerns. An example of the large implications of this rule is the recent project approved by the Indiana Regulatory Commission (IURC) of approximately one (\$1) billion dollars in pollution control equipment that Duke Energy is installing to comply with this rule. There commenter supports the changes that IDEM included in the draft rule to address comments made during the rulemaking process. First, the commenter supports the revised draft rule that includes the fuel adjustment factors included in the federal rule providing a more

reasonable balance in the treatment of coal versus natural gas-fired generation. Second, the commenter agrees that companies should be encouraged to reinvest and refurbish existing brownfield sites instead of building on new greenfield sites. Third, the commenter supports the revised draft rule that includes a incentive for companies to build new more efficient and cleaner burning coal-fired power plants, such as integrated gasification combined cycle (IGCC) facilities. Fourth, the commenter supports the revised draft rule that includes a mechanism for providing some certainty to how many early NO_x reduction credits will be available for each unit. There are few remaining issues with the rule that should be addressed through the utilities rule workgroup process. (DUKE)

Response: IDEM appreciates the support and will continue to work with all commenters to address remaining issues by final adoption.

Comment: This is a very important public health rule and will result in large reductions of emissions from SO₂ and NO_x, which are precursors of ozone and fine particles, the two (2) main air pollutants that affect thousands of adults and children with asthma. A 2002 report on the asthma burden in Indiana prepared by the State Department of Health and the Indiana Joint Asthma Coalition reported that as many as fifteen percent (15%) of Indiana households reported that they had at least one (1) child who had been diagnosed with asthma. Fine particles are also associated with cardiovascular effects. The commenter supports the improvements that IDEM has made to the EE/RE set-aside, including a new provision whereby a portion of unused EE/RE allowances can be used to fund a grant program for small projects that might not otherwise get any sort of incentive. The commenter also supports the changes to the compliance supplement pool that includes an incentive for CAIR control technologies with a mercury co-benefit. (IKE)

Response: IDEM agrees and appreciates the support.

Comment: EE/RE set-aside is an important program that should receive full support. As energy costs rise energy efficiency is going to be an important way for organizations to meet these rising utility costs. There are still people throughout the state that do not know about this program and IDEM should expand efforts to educate the public that this program exists. The commenter is concerned that the EE/RE set-aside awards allowances for IGCC, since it is not a renewable energy source. The program should be used to promote renewable energy sources, such as wind energy. (HEC)

Response: IDEM appreciates the support. IDEM acknowledges that interest in the Clean Energy Credit Program has not been at the level anticipated when the program was initially available. However, IDEM and the Energy Office have worked extensively over the past year to increase the marketing of the program. In 2004, a brochure explaining the program was developed and mailed to the largest energy users in Indiana. There have also been increased efforts to market the program to companies that may be applying for Energy Office grants and to promote the program at various workshops or conferences. The effort has provided results, in that, IDEM has received applications totaling over one hundred (100) allowances for 2006 and over fifty (50) allowances were granted for 2005. IDEM and the Energy Office will continue to

aggressively promote the program to increase applications even further. IGCC projects were included based on highly efficient electrical generation, not because of the use of renewable energy.